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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. 08/821,890 03/21/97 COWAN EXAMINER LM41/0413 FITCH EVEN TABIN & FLANNERY LE,U 135 SOUTH LASALLE STREET ART UNIT PAPER NUMBER SUITE 900 CHICAGO IL 60603-4277 2771 DATE MAILED: 04/13/99

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

PTO-90C (Rev. 2/95) \*U.S. GPO: 1996-404-496/40510

1- File Copy

## Office Action Summary

Application No. 08/821,890 Applicant(s)

Cowan et al

Examiner

Uyen Le

Group Art Unit 2771

Responsive to communication(s) filed on Feb 1, 1999	·
X This action is FINAL.	
Since this application is in condition for allowance except for formal in accordance with the practice under Ex parte Quayle, 1935 C.D. 11	; 453 O.G. 213.
A shortened statutory period for response to this action is set to expire is longer, from the mailing date of this communication. Failure to respon application to become abandoned. (35 U.S.C. § 133). Extensions of time 37 CFR 1.136(a).	d within the period for response will cause the
Disposition of Claims	
	is/ere pending in the application.
Of the above, claim(s)	is/are withdrawn from consideration.
☐ Claim(s)	
X Claim(s) 1-25	is/are rejected.
☐ Claim(s)	is/are objected to.
☐ Claims are	
Application Papers  See the attached Notice of Draftsperson's Patent Drawing Review. The drawing(s) filed on is/are objected to by The proposed drawing correction, filed on is The specification is objected to by the Examiner.	the Examiner.
☐ The oath or declaration is objected to by the Examiner.	
Priority under 35 U.S.C. § 119  Acknowledgement is made of a claim for foreign priority under 35  All Some* None of the CERTIFIED copies of the prioric received.  received in Application No. (Series Code/Serial Number)  received in this national stage application from the International Series Code/Serial Number)  *Certified copies not received:  Acknowledgement is made of a claim for domestic priority under 5	onal Bureau (PCT Rule 17.2(a)).
Attachment(s)	
<ul> <li>Notice of References Cited, PTO-892</li> <li>□ Information Disclosure Statement(s), PTO-1449, Paper No(s).</li> <li>□ Interview Summary, PTO-413</li> <li>□ Notice of Draftsperson's Patent Drawing Review, PTO-948</li> <li>□ Notice of Informal Patent Application, PTO-152</li> </ul>	
<ul> <li>Notice of Informal Patent Application, PTO-152</li> <li> SEE OFFICE ACTION ON THE FOLL</li> </ul>	OWING PAGES

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#### DETAILED ACTION

#### Answer to Arguments

1. Applicant's arguments regarding claims 1-25 have been fully considered but they are moot in view of the new ground(s) of rejection.

#### Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- 2. Claims 1-4, 15-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention because:
- o in claim 1, lines 19-21, the limitation regarding "the spectrum of channels on less than all of the plurality of distribution trunks including the substitute television program signal" is not understood because of the awkward wording. Therefore, the limitation can not be ascertained.
- o In claim 15, lines 2-4, the limitation "wherein the channels of the first channel modulated signals are distinct from the second channel modulated signals" is not understood. Therefore, the limitation can not be ascertained.
- o In claim 17, lines 4-6, the limitation "the channel modulators comprising a number of modulators equal to the number of distribution trunks for each channel of the second channel

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modulated signals" is not understood. Therefore, the limitation can not be ascertained.

The art rejection of claims 1-4, 15-17 is applied as best understood in light of the rejection under 35 U.S.C.112 second paragraph discussed above.

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1-13, 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wallerstein (US Patent 3,366,731), in view of Eskin et al (US patent 4,331,973).

  Regarding claim 1, Wallerstein discloses a system permitting consumer response analysis including a television distribution system wherein the head end transmits normal television program signal and substitute program signals for demographically selected viewers distributed (see the abstract, columns 1-2). Aplicant's distribution trunk reads on Wallerstein's split cable system where a plurality of channels and cable segments are directed to a geographical area of the community (see column 2, lines 40-64). The claimed signal distribution circuitry for receiving the normal and substitute television program signals and for combining into spectrums of channels on a plurality of distribution trunks reads on the fact that the system of Wallerstein carries a plurality

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of cable segments permitting blocking and substituting television signals on any channel in any segment (see column 2, line 40- column 3, line 20). The difference is Wallerstein does not mention a plurality of product sales collection units and a market research computer as claimed. However, Wallerstein explicitly shows that one of the objects of the system is to measure the effectiveness of consumer response as compared to response to other media (see column 1, lines 45-49). Eskin shows a plurality of scanners in stores for collecting information representing purchases by the consumers. Clearly the information is processed by a computer doing market research (see Figure 1). The difference is Eskin does not specifically mention that the store is collecting purchase information from consumers connected to the same distribution trunk. Since each trunk targets a specific audience, it would have been obvious to one of ordinary skill in the art to modify the system of Wallerstein by adding product sales units as taught by Eskin in order to measure the effectiveness of television advertising and by further collecting purchases from consumers attached to the same trunk in order to obtain meaningful survey results.

Regarding claim 2, a controller apparatus for controlling signal substitution on the distribution trunk is inherently present in the system of Wallerstein in order to block and substitute signals as described at column 2, lines 40-70). The difference is Wallerstein does not show that the information is provided to the market research computer system. In order to research the effectiveness of television advertising, clearly the information on substitute signals must be

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provided to the computer system. Therefore, it would have been obvious to one of ordinary skill in the art to modify the system of Wallerstein by using a computer as discussed in claim 1 above and by providing the substitute information to the computer in order for the computer to process the results to see how substitute signals influence consumers purchasing behavior.

Regarding claim 3, the system of Wallerstein clearly has consumers distributed throughout a viewer community because their behavior in response to substituted signals is the main subject of interest in this system. Furthermore, Wallerstein' shows a split cable system for generating a plurality of identical copies (see column 2, line 35- column 3, line 20). The difference is Wallerstein does not mention that the signals are conveyed by fiber optic to geographically grouped consumers. Official notice is taken that it is well known in the art to use fiber optic to transmit signals. Therefore, it would have been obvious to one of ordinary skill in the art to modify the method of Wallerstein by transmitting over fiber optic to geographically grouped consumers in order to benefit from the quality of fiber optic digital transmission.

Regarding claim 4, although Wallerstein and Eskin do not mention that a sales collection unit is located in a store shopped predominately by consumers from one of the geographic areas as claimed, it would have been obvious to one of ordinary skill in the art to add such a sales collection unit since the system is intended to gather information about buying behavior of

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panelists in a particular zone of survey.

Regarding claim 5. Wallerstein discloses a method for analyzing consumer response including distributing television programming to a plurality of household. The step of presenting substitute and normal television programming to different zones is taught by Wallerstein when Wallerstein shows that "taking a series of four adjacent households, each household may be on a different wired system" (see column 2, lines 2-4). Wallerstein does not show the steps of associating zones with data collection points, assigning addresses to the collection points, accumulating consumer purchase data and analyzing the collected data as claimed. Eskin shows that each collection point such as stores and scanners has an ID in the computer system (see Figure 1). Furthermore, since the substitute signals target consumers in a zone, clearly it is beneficial to associate a zone with data collection points in the same zone. Therefore, it would have been obvious to one of ordinary skill in the art to modify the system of Wallerstein by broadening each household into a zone and by adding identifiable data collection points as taught by Eskin and by further associating data collection points with each zone in order to research a group of households receiving the same substitute signals in that zone for market research purpose.

Claim 6 merely reads on the fact that the system of Wallerstein as modified by Eskin identifies and stores purchasing behaviors of consumers in a targeted zone.

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Regarding claim 7, Eskin discloses storing demographic data (see column 3, line 2). Therefore, it would have been obvious to one of ordinary skill in the art to modify the method of Wallerstein by adding demographic data to the system in order to research consumers sharing similar demographic data.

Regarding claim 8, although Wallerstein and Eskin do not mention that data is collected only for similar demographic data description, it would have been obvious to one of ordinary skill in the art to do so in order to obtain meaningful market research results.

Regarding claim 9, Wallerstein discloses a television and analysis system including a plurality of normal channel sources and a source of a substitute channel (see the abstract), signal distribution circuitry (see Figure 1), apparatus for generating a plurality of substantially identical copies of the spectrum of channels and apparatus for connecting substantially identical copies to different households (see column 2, line 20- column 3, line 20). Wallerstein teaches the concept of zone when Wallerstein shows that "taking a series of four adjacent households, each household may be on a different wired system" (see column 2, lines 2-4). The difference is Wallerstein does not show a plurality of customer purchase data collectors and data analysis computer system. Eskin shows a plurality of customer purchase data collectors 16 and data analysis computer 18 (see

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Figure 1). Therefore, it would have been obvious to one of ordinary skill in the art to modify the system of Wallerstein by adding a plurality of data collectors and a data analysis computer system as taught by Eskin in order to systematically collect and process data showing purchasing behaviors of consumers targeted by substitute signals.

Regarding claim 10, the system of Wallerstein tracks the behavior of subscribers exposed to substitute programs. Since the programs are distributed in a specific area, it would have been obvious to one of ordinary skill in the art to locate customer purchase data collector in a store a majority of whose purchasers are subscribers on one of the zones in order to receive accurate meaningful results for the survey.

Regarding claim 11, although Wallerstein does not show a distribution trunk connecting channels to zones separated by zones connected to other trunks, it would be obvious to one of ordinary skill in the art to do so in order to select panelists demographically because not all subscribers with the same demographic characteristics reside in the same zone served by the same trunk.

Regarding claim 12, the system of Wallerstein distributes substitute programs to selected subscribers thus it would have been obvious to one of ordinary skill in the art to select the zones connected to a distribution trunk in such a way that they demographically represent the

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community for market research purposes because this would facilitate distribution of specific advertisements to a targeted group of subscribers.

Regarding claim 13, official notice is taken that it is well known in the art to use fiber optic to transmit signals. Therefore, it would have been obvious to one of ordinary skill in the art to modify the method of Wallerstein by transmitting over fiber optic to geographically grouped consumers in order to benefit from the quality of fiber optic digital transmission.

Regarding claim 22, Wallerstein discloses a method for use in a consumer response analyzing system comprising apparatus for distributing television to a plurality of zones in a community of consumers (see Figure 1). The difference is Wallerstein does not show a market research computer system. Eskin discloses such a computer system (see the abstract). Note:

- the step of identifying a consumer parameter is met when panelists are selected;
- the step of storing in the computer data relating panelist parameters and zones is met when the consumer's ID is scanned by the store scanner;
- o the step of "presenting television programming ... second set of zones" is met when the operator of the system controls the television messages being received by the panelist (see column 2, lines 54-57);
- the step of "conducting a survey...consumer purchase data" is met when the panelists present

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their ID to be scanned at the store;

the step of "analyzing the survey...of substitute programming" is met when the data collected at stores are processed at the central processor 18 (see Figure 1). Furthermore, it is clear that storing data representing the associations between consumer parameters and zones must be performed before presenting substitute television programs in order to assess the effectiveness of such programs. Therefore, it would have been obvious to one of ordinary skill in the art to implement the method of Wallerstein by computerizing the method as taught by Eskin in order to systematically process data for research purpose.

Regarding claims 23-25, the method taught by Wallerstein and Eskin identifies panelists by their scanned ID at the store. Each bar code corresponds to a panelist receiving station which inherently contains other consumer parameters such as telephone number, address and name. Furthermore, it would have obvious that the information is stored in the market research computer as claimed for the purpose of identification in order to assess the effectiveness of substitution programs.

4. Claims 14-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wallerstein, in view of Eskin, further in view of Oberle et al (US patent 5,389,964).

Regarding claim 14, although Wallerstein and Eskin do not explicitly mention combiners, it is well

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known in the art to use a combiner in signal distribution system as shown by Oberle (see combiner 148 in Figure 4). Thus it would have been obvious to one skilled in the art to modify the system of Wallerstein and Eskin by adding combiners as taught by Oberle in order to combine the received programs into channels compatible with the transmission and reception of cable television signals. Besides, it would have been obvious that different trunks would require different combiners, thus the number of combiners should be equal to the number of distribution trunks in order to have full control over what signals to send for each trunk.

Regarding claim 15, Eskin discloses the concept of distinct signals (see column 2, lines 40-41).

Regarding claim 16, official notice is taken that it is well known in the art to use a video switch to selectively connect the inputs to the output ports. Furthermore, Wallerstein clearly shows that the signals at the output ports are combined into a plurality of cable television channel spectrum (see column 2, lines 45-49) equal to the number of distribution trunk (see column 2, lines 57-60). Therefore, it would have been obvious to one of ordinary skill in the art to modify the system of Wallerstein by adding a video switch in order to selectively connect signals at the output ports and to combine output ports into cable TV spectrums for each distribution trunk in order to target various audiences.

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Regarding claim 17, Wallerstein discloses the use of modulators 66. Furthermore, official notice is taken that it is well known in the art to use a video switch to selectively connect video channels. Therefore, it would have been obvious to one of ordinary skill in the art to modify the system of Wallerstein by connecting modulators to the outputs of a video switch in order to select and transmit the desired signals to targeted audiences.

Regarding claim 18, see reasons for rejection as discussed in claim 16 above.

Regarding claim 19, see reasons for rejection as discussed in claim 17 above

Regarding claims 20, 21, Wallerstein discloses the concept of providing normal channel and substitute channel to the distribution trunk (see column 2). Although Wallerstein does not explicitly mention that a switched combiner is used, it is well known in the art as shown by Oberle to use a switched combiner to combine signals and route the desired signals to the distribution trunk (see Figure 4). Thus it would have been obvious to one skilled in the art to modify the system of Wallerstein by using a switched combiner in order to select the combined modulated channels to a targeted audience.

Conclusion

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5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosures.

Malec et al (US 5,490,060) teach a passive data collection system for market research dat.

Von Kohorn (US 4,876,592) teaches a system for merchandising and the evaluation of responses to broadcast transmissions.

Carles (US 5,661,516) teaches a system and method for selectively distributing commercial messages over a communication network.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office Action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner

should be directed to Uyen Le whose telephone number is (703) 305-4134. The examiner can

be reached on Monday through Thursday from 7:00am to 4:30pm. The examiner can also be

reached on alternate Fridays from 7:00am to 3:30pm.

If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Thomas

Black can be reached on (703)305-9707.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington D.C. 20231.

or faxed to:

(703)308-9051, (for formal communications intended for entry)

or:

(703)308-5359 (for informal or draft communications, please label

"PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington,

VA., Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the Group receptionist whose telephone is (703)305-3900.

SUPERVISORY PATENT EXAMINER

**GROUP 2700**